

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

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1-16. (Canceled)

17. (Previously Added) A semiconductor device, comprising:

a metal-oxide-semiconductor field-effect transistor including:

a silicon substrate,

a gate insulation film on the silicon substrate, and

a gate electrode on the gate insulation film, the gate electrode including a germanium film on the gate insulation film,

wherein p-type impurities are doped into the germanium film, and a range of concentration of the p-type impurities is about  $10^{17}$  to  $10^{20}$  cm<sup>-3</sup>.

18. (Previously Added) The semiconductor device according to claim 17, wherein the germanium film includes at least one of a single-crystalline germanium film, a polycrystalline germanium film and an amorphous germanium film.

19. (Previously Added) The semiconductor device according to claim 17, wherein the gate electrode includes a multi-layer structure having a low resistance conductive film.

20. (Previously Added) The semiconductor device according to claim 19, wherein the low resistance conductive film includes at least one of a transition metal, a transition metal silicide, and a transition metal nitride film.

21. (Previously Added) The semiconductor device according to claim 19, wherein the multi-layer structure is provided with a polysilicon film in between the germanium film and the low resistance conductive film.

22. (Previously Added) A semiconductor device, comprising:  
a metal-oxide-semiconductor field-effect transistor including:  
a silicon film,  
a gate insulation film on the silicon film, and  
a gate electrode on the gate insulation film, the gate electrode including  
a germanium film on the gate insulation film,

wherein p-type impurities are doped into the germanium film, and a range of  
concentration of the p-type impurities is about  $10^{17}$  to  $10^{20}$   $\text{cm}^{-3}$ .

23. (Previously Added) The semiconductor device according to claim 22, wherein  
the silicon film forms a substrate structure.

24. (Previously Added) The semiconductor device according to claim 22, wherein  
the germanium film includes at least one of a single-crystalline germanium film, a  
polycrystalline germanium film and an amorphous germanium film.

25. (Previously Added) The semiconductor device according to claim 22, wherein  
the gate electrode includes a multi-layer structure having a low resistance conductive film.

26. (Previously Added) The semiconductor device according to claim 25, wherein  
the low resistance conductive film includes at least one of a transition metal, a transition  
metal silicide, and a transition metal nitride film.

27. (Previously Added) The semiconductor device according to claim 25, wherein  
the multi-layer structure is provided with a polysilicon film in between the germanium film  
and the low resistance conductive film.

28. (New) The semiconductor device according to claim 17, wherein the silicon  
substrate is a p-type substrate.

29. (New) The semiconductor device according to claim 17, wherein the p-type  
impurities are boron.

30. (New) The semiconductor device according to claim 22, wherein the silicon substrate is a p-type substrate.

31. (New) The semiconductor device according to claim 22, wherein the p-type impurities are boron.

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